## ABSTRACT OF THE DISCLOSURE

A transmitter, a method of detecting an available node number, and a method of generating topology data are disclosed for a ring type network. The transmitter in a ring type network includes a packet generation and transmission part generating a packet to cause other transmitters in the ring type network to set node numbers assigned to the transmitters and circulating the packet in the ring type network, and a node number detection part, in 10 response to receipt of the circulated packet, reading the node numbers from the packet and detecting an available node number with reference to the read node numbers. According to the present invention, it is possible to maintain and operate a ring type network 15 with less operation steps to improve a maintenance and operation speed.